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EXAMINER	
BRITTAIN, JAMES R	

ART UNIT	PAPER NUMBER
3677	

DATE MAILED: 03/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/021,236	BARCLAY ET AL.	
	Examiner	Art Unit	
	James R. Brittain	3677	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 February 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *9-11,13-69,117-123 and 130-132* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *9-11,13-15,17-65,67-69,117-123 and 130-132* is/are rejected.

7)☒ Claim(s) *16 and 66* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Allowable Subject Matter

The indicated allowability of claims 9-11, 13-15, 17-65, 67-69, 117-123 and 130-132 is withdrawn in view of further review of the references of record. Rejections follow.

Claims 16 and 66 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 30 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Bennett et al. (US 4507535).

Bennett et al. (figures 1, 5) teaches a method for cutting flexible material, comprising: advancing the flexible material 12 toward a rotatable drum 52; engaging the rotatable drum with the flexible material; holding the flexible material against the rotatable drum while the rotatable drum is rotating; and cutting the flexible material with a laser beam , L, projecting from the interior of the rotatable drum through slots 68 in the rotatable drum.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 31, 32, 37, and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bennett et al. (US 4507535) in view of Kurihara et al. (US 5382773).

Bennett et al. (figures 1, 5) teaches a method for cutting flexible material, comprising: advancing the flexible material 12 toward a rotatable drum 52; engaging the rotatable drum with the flexible material; holding the flexible material against the rotatable drum while the rotatable drum is rotating; and cutting the flexible material with a laser beam , L, projecting from the interior of the rotatable drum through slots 68 in the rotatable drum. The difference is that the flexible material is described as paper and not a polymeric material. However, Kurihara et al. (figure 3) teaches a method of cutting flexible material wherein the web is a polymer such as polyethylene, polypropylene or other polymer rather than paper (col. 4, lines 51-57). It would have been obvious to modify the method of Bennett et al. such that it is used on a polymeric material in view of Kurihara et al. suggesting that it is desirable to cut not just paper carried by a rotatable drum with a laser but polymeric webs, too. As to claim 37, using a steering mirror to focus the laser would have been obvious in view of Kurihara et al. suggesting using a focusing mirror 37 to steer the laser beam. In regard to claim 39, using a carbon dioxide laser would have been obvious in view of Kurihara et al. suggesting using a carbon dioxide laser because it is desirable to use a laser whose wavelength is absorbed by the web (col. 3, lines 57-66).

Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bennett et al. (US 4507535) in view of Kurihara et al. (US 5382773) as applied to claim 32 above, and further in view of Kendall (WO 98/16430).

Further modification of the method of cutting taught by Bennett et al. such that the cutting produces bags would have been obvious in view of Kendall (figure 1) teaching that while lasers have been used in processes producing welds, seals or score lines in the longitudinal direction along a moving film that it is desirable to provide lateral scanning so as to form individual bags (page 2, line 13 - page 3, line 4; page 12, lines 9-13).

Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bennett et al. (US 4507535) in view of Kurihara et al. (US 5382773) as applied to claim 32 above, and further in view of Andreoli et al. (US 5225649).

Further modification of the method of cutting taught by Bennett et al. such that the holding of the flexible material against the drum is accomplished by suctioning would have been obvious in view of Andreoli et al. (figures 4-6) teaching that suctioning the web against the drum improves the feeding and guiding of the web across the drum (col. 1, lines 55-60; col. 2, lines 27-36).

Claims 35 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bennett et al. (US 4507535) in view Kendall (WO 98/16430).

Bennett et al. (figures 1, 5) teaches a method for cutting flexible material, comprising: advancing the flexible material 12 toward a rotatable drum 52; engaging the rotatable drum with the flexible material; holding the flexible material against the rotatable drum while the rotatable drum is rotating; and cutting the flexible material with a laser beam , L, projecting from the interior of the rotatable drum through slots 68 in the rotatable drum. The difference is that the flexible material is not cut into segments that are then collected. Further modification of the method of cutting taught by Bennett et al. such that the cutting produces bags would have been

obvious in view of Kendall (figure 1) teaching that while lasers have been used in processes producing welds, seals or score lines in the longitudinal direction along a moving film that it is desirable to provide lateral scanning so as to form individual bags (page 2, line 13 - page 3, line 4; page 12, lines 9-13) and inherently these bags would then be collected for distribution. Applicant is reminded that "[I]n considering the disclosure of a reference, it is proper to take into account not only specific teachings of the reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom." *In re Preda*, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968).

Claims 40-42, 50 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bennett et al. (US 4507535) in view of Andreoli et al. (US 5225649).

Bennett et al. (figures 1, 5) teaches a method of cutting flexible material, comprising: holding the flexible material 12 against a rotatable drum 52, the rotatable drum including slots 68; and cutting the flexible material with a laser beam, L, projected from an inside of the drum into the slots method for cutting flexible material. The difference is that the method does not produce segments by laterally traversing the laser through slots. However, Andreoli et al. (figures 4-6) teaches a method of cutting flexible material by having the laser move laterally across the grooves in a drum as being desirable so as to cut segments of the web. As cutting segments would be desirable, modification of the method of cutting taught by Bennett et al. such that segments are created by extending the slots laterally across the drum would have been obvious in view of Andreoli et al. suggesting that it is desirable to do so in order to cut segments of flexible material. As to claim 41, further modification of the method of cutting taught by Bennett such that the holding of the flexible material against the drum is accomplished by

suctioning would have been obvious in view of Andreoli et al. (figures 4-6) teaching that suctioning the web against the drum improves the feeding and guiding of the web across the drum (col. 1, lines 55-60; col. 2, lines 27-36). In regard to claim 42, modification of the method of Bennett et al. such that the laser is translated would have been obvious in view of Andreoli et al. suggesting the translation of the cutting laser beam as being desirable so as to have a precise cutting of the web (col. 3, lines 8-24). As to claim 50, Bennett et al. (figures 1, 5) teaches a method of cutting a flexible material comprising: holding the flexible material 12 relative to an outer surface of a drum 52 having a plurality of slots 68 extending from the outer surface to an inner surface of the rotatable drum; directing a laser beam, L, outwardly toward the inner surface; and rotating the rotatable drum such that the laser beam sequentially passes through the plurality of slots to cut by melting the flexible material. The difference is that the method does not produce segments by laterally traversing the laser through slots. However, Andreoli et al. (figures 4-6) teaches a method of cutting flexible material by having the laser move laterally across the grooves in a drum as being desirable so as to cut segments of the web. As cutting segments would be desirable, modification of the method of cutting taught by Bennett et al. such that segments are created by extending the slots laterally across the drum would have been obvious in view of Andreoli et al. suggesting that it is desirable to do so in order to cut segments of flexible material. As to claim 53, further modification of the method of cutting taught by Bennett such that the holding of the flexible material against the drum is accomplished by suctioning would have been obvious in view of Andreoli et al. (figures 4-6) teaching that suctioning the web against the drum improves the feeding and guiding of the web across the drum (col. 1, lines 55-60; col. 2, lines 27-36).

Claims 43, 51 and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bennett et al. (US 4507535) in view of Andreoli et al. (US 5225649) as applied to claim 40 above, and further in view of Mominee et al. (US 3808394).

Further modification of the method of cutting material taught by Bennett et al. such that the laser beam projects along a radial direction with respect to a central axis would have been obvious in view of Mominee (figures 3, 4, 7) in which the laser beam projects from the central axis of the drum so as to provide symmetry. As to claim 52, further modification of the method of cutting flexible material taught by Bennett et al such that the laser is operated intermittently would have been obvious because while Bennett chooses not to use an intermittent beam chopper because of the expense, Mominee et al. suggest a less expensive switch 66 to provide intermittent operation.

Claims 44-46, 48, 49, and 55-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bennett et al. (US 4507535) in view of Andreoli et al. (US 5225649) as applied to claim 40 above, and further in view of Kendall (WO 98/16430).

Further modification of the method of cutting taught by Bennett et al. such that the cutting produces bags would have been obvious in view of Kendall (figure 1) teaching that while lasers have been used in processes producing welds, seals or score lines in the longitudinal direction along a moving film that it is desirable to provide lateral scanning by a carbon dioxide laser (page 8, line 12) so as to form individual bags (page 2, line 13 - page 3, line 4; page 12, lines 9-13) made from polymers (page 7, lines 11-15) and that metal foils can also be used (page 12, line 6), which would inherently be opaque.

Claims 47 and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bennett et al. (US 4507535) in view of Andreoli et al. (US 5225649) as applied to claim 40 above, and further in view of Snellman et al. (US 5611949).

Further modification of the method of cutting taught by Bennett et al. (figures 1, 5) such that the cutting is controlled by a galvanometer would have been obvious in view of Snellman et al. teaching the use of a galvanometer 141 as being conventional in controlling the laser beam (col. 12, lines 9-13).

Claims 9-11, 13-15, 17-19, 21, 22, 25-29, 60, 64, 67, 69, 117-123, 130-132 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boccia (US 4094729) in view of Kendall (WO 98/16430).

Boccia (figures 1, 2) teaches a method of generating end terminations along a fastener, comprising: providing the fastener with first and second tracks 13, 14, the first track including a first profile, the second track including a second profile for interlocking with the first profile; and cutting the fastener with heat sealing bars 42, 43 to divide the fastener into segments associated with respective ones of the recloseable bags, each segment extending between opposing ends. The difference is that a laser isn't used to perform the sealing and cutting. However, Kendal (figure 1) teaches a method replacing hot welding, radio frequency welding and ultrasonic welding in the bag making field with laser cutting and sealing so as to avoid the disadvantage of mechanical contact between the substrate to be welded and cut and the cutting equipment because mechanical contact can result in substrate sticking to the sealing/cutting equipment, and requires blades or the like which need regular sharpening, cleaning and maintenance (page 1, lines 6-17). As it would be beneficial to avoid the wear of the contacting equipment of Boccia, it

would have been obvious to modify the method of generating end terminations along a fastener taught by Boccia so that a laser is used in view of Kendall teaching that it is desirable to do so. In regard to claim 119, the fastener is inherent in the method suggested by the combination. As to claim 13, Boccia (figures 1, 2) teaches a method of creating a plurality of recloseable bags from a web of material, comprising: providing the web of material 10, 12 including a fastener 13, 14 attached to the web, the fastener allowing the bags to be recloseable; cutting the fastener at spaced locations corresponding to the ends of the plurality of recloseable bags; and cutting the web of material adjacent to the spaced locations to form the plurality of recloseable bags. The difference is that a laser isn't used to perform the sealing and cutting. However, Kendal (figure 1) teaches a method replacing hot welding, radio frequency welding and ultrasonic welding in the bag making field with laser cutting and sealing by translating so as to avoid the disadvantage of mechanical contact between the substrate to be welded and cut and the cutting equipment because mechanical contact can result in substrate sticking to the sealing/cutting equipment, and requires blades or the like which need regular sharpening, cleaning and maintenance (page 1, lines 6-17). As it would be beneficial to avoid the wear of the contacting equipment of Boccia, it would have been obvious to modify the method of generating end terminations along a fastener taught by Boccia so that a laser is used in view of Kendall teaching that it is desirable to do so. In regard to claim 18, further modification of the method of making a plurality of bags taught by Boccia such that the web moves along a drum while the laser cuts and seals would have been obvious in view of Kendall teaching that it is desirable to utilize a rotating drum (page 8, lines 5-11) so as to more efficient. In regard to claim 120, the fastener is inherent in the method suggested by the combination. As to claim 25, Boccia (figures 1, 2) teaches a method of creating

a plurality of recloseable bags from a web of material 10, 12, comprising: providing the web of material including a fastener 13, 14 attached to the web; operating heated bars 42, 43 to seal the fastener at ends of the plurality of recloseable bags; and operating the bars to seal side edges of the plurality of recloseable bags. The difference is that a laser isn't used to perform the sealing and cutting. However, Kendal (figure 1) teaches a method replacing hot welding, radio frequency welding and ultrasonic welding in the bag making field with laser cutting by a carbon dioxide laser (page 8, line 12) and sealing by translating so as to avoid the disadvantage of mechanical contact between the substrate to be welded and cut and the cutting equipment because mechanical contact can result in substrate sticking to the sealing/cutting equipment, and requires blades or the like which need regular sharpening, cleaning and maintenance (page 1, lines 6-17). As it would be beneficial to avoid the wear of the contacting equipment of Boccia, it would have been obvious to modify the method of generating end terminations along a fastener taught by Boccia so that a laser is used in view of Kendall teaching that it is desirable to do so. In regard to claim 29, further modification of the method of making a plurality of bags taught by Boccia such that the web moves along a drum while the laser cuts and seals would have been obvious in view of Kendall teaching that it is desirable to utilize a rotating drum (page 8, lines 5-11) so as to more efficient. In regard to claim 121, the fastener is inherent in the method suggested by the combination. In regard to claim 60, Boccia (figures 1, 2) teaches a method of creating end terminations on a two-part fastener 13, 14 attached to a web 10, 12 of material for producing a plurality of bags, comprising: holding the web of material relative to heated sealing bars 42, 43 with the two-part fastener positioned a known location; and fusing both parts of the two-part fastener with the heated sealing bars. The difference is that a laser isn't used to perform

the sealing and cutting. However, Kendal (figure 1) teaches a method replacing hot welding, radio frequency welding and ultrasonic welding in the bag making field with laser cutting by a carbon dioxide laser (page 8, line 12) and sealing by translating so as to avoid the disadvantage of mechanical contact between the substrate to be welded and cut and the cutting equipment because mechanical contact can result in substrate sticking to the sealing/cutting equipment, and requires blades or the like which need regular sharpening, cleaning and maintenance (page 1, lines 6-17). As it would be beneficial to avoid the wear of the contacting equipment of Boccia, it would have been obvious to modify the method of generating end terminations along a fastener taught by Boccia so that a laser is used in view of Kendall teaching that it is desirable to do so. As to claim 117, Boccia (figures 1, 2) teaches a method of forming a fastener for a bag, comprising: providing the fastener with first and second tracks 13, 14, the first track including a first profile, the second track including a second profile for interlocking with the first profile; and sealing ends of the first and second tracks by contacting the tracks with the device that performs the sealing. The difference is that contacting occurs during the sealing by the heated sealing bars. However, Kendal (figure 1) teaches a method replacing hot welding, radio frequency welding and ultrasonic welding in the bag making field with laser cutting by a carbon dioxide laser (page 8, line 12) and sealing by translating so as to avoid the disadvantage of mechanical contact between the substrate to be welded and cut and the cutting equipment because mechanical contact can result in substrate sticking to the sealing/cutting equipment, and requires blades or the like which need regular sharpening, cleaning and maintenance (page 1, lines 6-17). As it would be beneficial to avoid the wear of the contacting equipment of Boccia, it would have been obvious to modify the method of generating end terminations along a fastener taught by

Boccia so that a laser is used in view of Kendall teaching that it is desirable to do so as to avoid contact. As to claim 122, Boccia (figures 1, 2) teaches a method of forming a fastener for reclosable packages, the method comprising: forming ends of first and second tracks 13, 14 comprising corresponding interlocking profiles, wherein the forming is by a device that contacts the first and second tracks; and sealing the ends of first and second tracks with heat. The difference is that contacting occurs during the sealing by the heated sealing bars and there is no teaching of surface tension being used to form the termination. However, Kendal (figure 1) teaches a method replacing hot welding, radio frequency welding and ultrasonic welding in the bag making field with laser cutting by a carbon dioxide laser (page 8, line 12) and sealing by translating so as to avoid the disadvantage of mechanical contact between the substrate to be welded and cut and the cutting equipment because mechanical contact can result in substrate sticking to the sealing/cutting equipment, and requires blades or the like which need regular sharpening, cleaning and maintenance (page 1, lines 6-17). As it would be beneficial to avoid the wear of the contacting equipment of Boccia, it would have been obvious to modify the method of generating end terminations along a fastener taught by Boccia so that a laser is used in view of Kendall teaching that it is desirable to do so as to avoid contact and thereby inherently provide the termination formation by surface tension. As to claim 130, Boccia (figures 1, 2) teaches a method of forming a fastener for reclosable packages, the method comprising: providing a first track 13; providing a second track 14 positioned for interlocking engagement with the first track; simultaneously forming one or more ends of the first and second tracks by a contact process; and sealing the first and second tracks to form smooth surfaces. The difference is that contacting occurs during the sealing by the heated sealing bars and there is no teaching of

surface tension being used to form the termination so as to provide round surfaces. However, Kendal (figure 1) teaches a method replacing hot welding, radio frequency welding and ultrasonic welding in the bag making field with laser cutting by a carbon dioxide laser (page 8, line 12) and sealing by translating so as to avoid the disadvantage of mechanical contact between the substrate to be welded and cut and the cutting equipment because mechanical contact can result in substrate sticking to the sealing/cutting equipment, and requires blades or the like which need regular sharpening, cleaning and maintenance (page 1, lines 6-17). As it would be beneficial to avoid the wear of the contacting equipment of Boccia, it would have been obvious to modify the method of generating end terminations along a fastener taught by Boccia so that a laser is used in view of Kendall teaching that it is desirable to do so as to avoid contact and thereby inherently provide the termination formation by surface tension that would be round. In regard to claim 131, Boccia (figures 1, 2) teaches a method of forming a fastener for a reclosable package, the method comprising: providing a first track 13 including a first profile; providing a second tracking 14 including a second profile for interlocking with the first profile; and sealing the first and second tracks with a contact sealing mechanism 42, 43 to produce one or more ends. The difference is that contacting occurs during the sealing by the heated sealing bars and there is no teaching of surface tension being used to form the termination. However, Kendal (figure 1) teaches a method replacing hot welding, radio frequency welding and ultrasonic welding in the bag making field with laser cutting by a carbon dioxide laser (page 8, line 12) and sealing by translating the beam so as to avoid the disadvantage of mechanical contact between the substrate to be welded and cut and the cutting equipment because mechanical contact can result in substrate sticking to the sealing/cutting equipment, and requires blades or the like which need

regular sharpening, cleaning and maintenance (page 1, lines 6-17). As it would be beneficial to avoid the wear of the contacting equipment of Boccia, it would have been obvious to modify the method of generating end terminations along a fastener taught by Boccia so that a laser is used in view of Kendall teaching that it is desirable to do so as to avoid contact and thereby inherently provide the termination formation by surface tension. As to claim 132, Boccia (figures 1, 2) teaches a method of forming a fastener for a reclosable package, the method comprising: providing a first track 13 including a first profile; providing a second track 14 including a second profile for interlocking with the first profile; and cutting the first and second track with a contact cutting mechanism 42, 43 to produce one or more ends. The difference is that contacting occurs during the sealing by the heated sealing bars and there is no teaching of surface tension being used to form the termination. However, Kendal (figure 1) teaches a method replacing hot welding, radio frequency welding and ultrasonic welding in the bag making field with laser cutting by a carbon dioxide laser (page 8, line 12) and sealing by translating the beam so as to avoid the disadvantage of mechanical contact between the substrate to be welded and cut and the cutting equipment because mechanical contact can result in substrate sticking to the sealing/cutting equipment, and requires blades or the like which need regular sharpening, cleaning and maintenance (page 1, lines 6-17). As it would be beneficial to avoid the wear of the contacting equipment of Boccia, it would have been obvious to modify the method of generating end terminations along a fastener taught by Boccia so that a laser is used in view of Kendall teaching that it is desirable to do so as to avoid contact and thereby inherently provide the termination formation by surface tension.

Claims 23 and 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boccia (US 4094729) in view of Kendall (WO 98/16430) as applied to claims 22 and 60 above, and further in view of Andreoli et al. (US 5225649).

Further modification of the method of cutting taught by Bennett et al. such that the holding of the flexible material against the drum is accomplished by suctioning would have been obvious in view of Andreoli et al. (figures 4-6) teaching that suctioning the web against the drum improves the feeding and guiding of the web across the drum (col. 1, lines 55-60; col. 2, lines 27-36).

Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Boccia (US 4094729) in view of Kendall (WO 98/16430) as applied to claim 18 above, and further in view of Kurihara et al. (US 5382773).

Further modification of the method of cutting taught by Bennett et al. such that the laser is located outside of an interior of the drum and a laser beam from the laser projects inwardly into the interior and then radially outward from the interior of the drum would have been obvious in view of Kurihara et al. (figure 3) teaching that it is desirable to have such a configuration for ease of tending the laser.

Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bennett et al. (US 4507535) in view of Snellman et al. (US 5611949).

Bennett et al. (figures 1, 5) teaches a method for cutting flexible material, comprising: advancing the flexible material 12 toward a rotatable drum 52; engaging the rotatable drum with the flexible material; holding the flexible material against the rotatable drum while the rotatable drum is rotating; and cutting the flexible material with a laser beam , L, projecting from the

interior of the rotatable drum through slots 68 in the rotatable drum. The difference is that the cutting is not controlled by a galvanometer. However, the use of a galvanometer 141 is conventional in controlling as taught by Snellman et al. so as to permit movement of the beam (col. 12, lines 9-13). As it would be beneficial to provide movement of the beam of the device of Bennett et al. it would have been obvious to use a galvanometer to control its movement as taught by Snellman et al.

Claim 65 is rejected under 35 U.S.C. 103(a) as being unpatentable over Boccia (US 4094729) in view of Kendall (WO 98/16430) as applied to claim 60 above, and further in view of Snellman et al. (US 5611949).

Further modification of the method of cutting taught by Bennett et al. (figures 1, 5) such that the cutting is controlled by a galvanometer would have been obvious in view of Snellman et al. teaching the use of a galvanometer 141 as being conventional in controlling the laser beam (col. 12, lines 9-13).

Claims 20, 62 and 63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boccia (US 4094729) in view of Kendall (WO 98/16430) as applied to claim 60 above, and further in view of Bennett et al. (US 4507535).

Further modification of the method of cutting taught by Bennett et al. (figures 1, 5) such that the beam projects from an interior of a drum through slots to the outside would have been obvious in view of Bennett et al. (figures 1, 5) teaching the use of the laser projecting from the inside of the drum as being desirable.

Claim 68 is rejected under 35 U.S.C. 103(a) as being unpatentable over Boccia (US 4094729) in view of Kendall (WO 98/16430) as applied to claim 60 above, and further in view of Robinson et al. (US 5279693).

Further modification of the method of cutting taught by Bennett et al. (figures 1, 5) such that the roller of Kendall has a circumferential groove to register the two part fastener would have been obvious in view of Robinson et al. (US 5279693) teaching the use of such a groove 314 in the roller so as to better guide the two part fastener.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James R. Brittain whose telephone number is 703-308-2222. The examiner can normally be reached on M, W & F 5:30-1:30, T 5:30-2:00 & TH 5:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. J. Swann can be reached on 703-306-4115. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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